

beneficiaries who were enrolled in an MA-PD or a drug plan with drug deductibles, tiered copayments, or mailorder services in the plan benefit design were more likely to experience CRN.

**PIH54****HEALTH CARE UTILIZATION AND COSTS AMONGST WOMEN WITH FEMALE SEXUAL DYSFUNCTION (FSD) AND HYPOACTIVE SEXUAL DESIRE DISORDER (HSDD)**

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**OBJECTIVES:** The health care utilization and costs among commercially insured women with a diagnosis of Female Sexual Dysfunction (FSD) and Hypoactive Sexual Desire Disorder (HSDD) in the United States. **METHODS:** The Thomson Reuters MarketScan® Database was used to identify women aged 18–64 with an ICD-9-CM coded diagnosis of FSD, including a subset with HSDD from January 1, 1998–September 30, 2006. A control group of women with no diagnosis of any sexual dysfunction was matched 3:1 to cases based on age, health plan and enrollment period. Controls were assigned the index date of their matched case. Health care utilization and costs were examined in the year prior (“pre-period”) to and following index (“post-period”). **RESULTS:** A total of 4831 women were coded as FSD (59% as HSDD) and matched to 14,493 controls. The FSD group had more outpatient visits and services in both the pre- (22.2 vs. 16.2,  $p < 0.001$ ) and post- (25.4 vs. 17.7,  $p < 0.001$ ) periods compared with their matched controls. They also consistently filled more prescriptions in the pre- (14.5 vs. 11.5,  $p < 0.001$ ) and post- (16.2 vs. 7.2,  $p < 0.001$ ) periods. Nearly identical patterns were observed in the HSDD group. These higher levels of utilization resulted in costs that were higher for FSD and HSDD women relative to their matched controls in the pre-period (\$1296 and \$ 1146 respectively). Similar patterns of increased health care utilization were also seen in the post-period for both FSD and HSDD patients (\$1,190 and \$897 respectively). The most significant drivers of health care costs for both groups were outpatient medical services (including professional visits, outpatient surgeries, and laboratory expenditures) and total prescription medication costs. **CONCLUSIONS:** Women diagnosed with FSD and HSDD use significantly more health care services than women without diagnosed sexual dysfunction. The resulting higher costs are driven by a greater use of outpatient services and prescription medications.

**PIH56****CARESS: THE CANADIAN REGISTRY OF SYNAGIS® SUMMARY OF 2006–2008 RSV SEASONS**

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**OBJECTIVES:** To understand current management (utilization, compliance) with palivizumab prophylaxis of children at high-risk of RSV infection in Canada. **METHODS:** A prospective, observational, registry of infants at high risk for RSV who received at least one dose of palivizumab during the 2006 to 2008 RSV seasons from 24 sites. Neonatal and demographic data were collected upon enrollment. Data on palivizumab utilization and compliance, including outcomes related to a respiratory infection were collected monthly until the full course of palivizumab was completed or at the end of the relevant RSV season. **RESULTS:** A total of 2910 infants were enrolled, age two days to 47 months (mean = 5.5 months). In total, 54.4% were male, 62.2% Caucasian, average gestational age (GA) was  $32.0 \pm 6.8$  completed weeks. 2079 (71.4%) infants received palivizumab because they were premature only (i.e.  $\leq 35$  completed weeks GA), 255 (8.8%) required oxygen, 288 (9.9%) had congenital heart disease and 288 (9.9%) were prophylaxed for other risk factors such as CNS disorders, airway anomalies and cystic fibrosis. Compliance was high; 77.8% received at least four injections of palivizumab between September and June each season. Overall 12, 973 doses were given. No directly related serious adverse events were identified. A total of 159 infants had 194 hospitalizations for respiratory tract infections (hospitalization rate 5.5%) and rates were highest in those with chronic lung disease (9.8%,  $p = 0.006$ ). The RSV positive hospitalization rate was only 0.96%. **CONCLUSIONS:** The RSV hospitalization rate observed in the 2006–2008 RSV seasons was lower than that found in several published reports (range 1.3%–5.3%). The rates of RSV hospitalization may be decreasing for various reasons such as high compliance with palivizumab prophylaxis, variability in RSV epidemiology, hospital admission criteria and preventive education.

**MENTAL HEALTH – Clinical Outcomes Studies****ALPRAZOLAM-RELATED DEATHS IN WEST VIRGINIA**

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**OBJECTIVES:** Alprazolam is a frequently prescribed benzodiazepine associated with abuse and misuse that can lead to fatalities. This study's aims were to: 1) describe the characteristics of alprazolam-related death cases; 2) describe the comorbidities, co-ingested drugs, and mean alprazolam concentrations of decedents; and 3) compare characteristics between alprazolam and non alprazolam-related death cases. **METHODS:** Data from all drug-related deaths in West Virginia from January 1,

2005 to November 16, 2007 were extracted from the Forensic Drug Database. Chi square tests compared categorical descriptive statistics between alprazolam and non-alprazolam cases. One-way ANOVA compared mean alprazolam blood concentrations based upon numbers of other ingested drugs. **RESULTS:** Of the 1199 drug-related deaths in the database, alprazolam was a contributing cause in 204 (17.0%) cases. It was involved in an increasing number of drug-related deaths over time. The mean age of alprazolam cases was 39.6 (+11.2) years; most were male (66.3%) and white (96.0%), with the deaths ruled accidental (90.2%). There was a prescription for alprazolam in over half the cases (52.5%); approximately one-third (33.8%) had a history of substance abuse or cardiovascular disease. At least one other drug was a contributor to death in 97.5% of the alprazolam cases, with an opiate detected in most cases (88.7%). The mean alprazolam blood concentration was significantly higher when taken alone than when ingested with one or more drugs ( $p < 0.001$ ). More alprazolam decedents were obese (43.9%) compared to non-alprazolam decedents (32.9%) ( $p = 0.005$ ). Alprazolam cases had a significantly greater average number of drugs implicated in death ( $2.9 + 1.0$ ) than non-alprazolam cases ( $2.3 + 1.3$ ) ( $p < 0.001$ ). **CONCLUSIONS:** Alprazolam-associated deaths are a significant public health problem in West Virginia; these cases have characteristics that can differ from other drug death cases. Certain drug combinations involving alprazolam may pose a greater risk for serious adverse events.

**PMH2****USE OF HYPNOTICS/ANXIOLYTICS IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER: ASSOCIATIONS WITH CHRONIC PAIN, SLEEP DISORDERS, AND ANTIDEPRESSANT SELECTION**

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**OBJECTIVES:** Many patients with major depressive disorder (MDD) suffer from chronic pain (CP) and sleep disturbances (SD). Little is known about associations between the use of hypnotics/anxiolytics for these conditions and the use of antidepressants in real-world clinical settings. This study examined the use of hypnotics and anxiolytics, their associations with CP and SD, and initiation of serotonin-norepinephrine reuptake inhibitors (duloxetine and venlafaxine XR) in a large managed-care population of patients with MDD. **METHODS:** A total of 153,913 patients who had at least 1 diagnosis of MDD during the year 2006 were selected from a large commercially insured administrative claims database. The analytic sample consisted of 47,109 (30.6%) males and 106,804 (69.4%) females, with a mean age of 43.6 years ( $SD = 12.7$ ). In accordance with ICD-9-CM, CP was defined as any pain of the following 6 categories: headache, rheumatoid arthritis, osteoarthritis, low back pain, fibromyalgia, and neuropathic pain. Hypnotics/anxiolytics were classified into 3 categories: benzodiazepines (BENZ), non-benzodiazepine hypnotics (NBENZH), and non-benzodiazepine anxiolytics (NBENZA). **RESULTS:** Of the 153,913 patients with MDD, 35.5% had CP; 5.3%, SD; and 7.3%, CP plus SD. Over the 1-year study period, 33.1% of patients were prescribed BENZ; 16.9%, NBENZH; and 6.1%, NBENZA. Of patients with MDD, patients also diagnosed with CP and SD were most frequently prescribed NBENZH, BENZ, and NBENZA (36.4%, 47.7%, 9.6%), followed by patients with SD (30.2%, 36.7%, 6.4%), CP (18.7%, 39.9%, 7.4%), and MDD only (11.6%, 26.1%, 4.6%). Prior use of BENZ ( $OR = 1.5$ , 95%  $CI = 1.4$ – $1.6$ ), NBENZH ( $OR = 1.6$ , 95%  $CI = 1.5$ – $1.7$ ), and NBENZA ( $OR = 1.2$ , 95%  $CI = 1.1$ – $1.3$ ) was significantly associated with initiation of duloxetine compared with venlafaxine XR. **CONCLUSIONS:** Hypnotics and anxiolytics are commonly used in MDD patients. CP and SD are associated with increased use of hypnotics and anxiolytics in MDD patients. Prior use of hypnotics and anxiolytics may be associated with antidepressant selection.

**PMH3****DEPRESSION: ETHNIC DIFFERENCES IN PREVALENCE, DIAGNOSIS, AND SYMPTOMS**

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**OBJECTIVES:** To assess ethnic differences in the prevalence, physician diagnosis and symptomatology of depression. **METHODS:** Data were taken from the 2008 US National Health and Wellness Survey (NHWS), a self-reported, Internet-based study of the disease status, attitudes, habits, and outcomes of adults age 18+. Ethnic groups included whites, blacks, Hispanics and Asians. Respondents self reported experiencing depression, depression diagnosed by a physician, and experiencing the following in the previous month: bothered by feeling down, depressed, or hopeless; bothered by having little interest or pleasure in doing things. Prevalence was calculated using frequency weights based on age, gender and race. Chi-square analyses were conducted to assess statistically significant differences. **RESULTS:** Of the 61,016 respondents, 22.2% (Projected 53.8M; 25%) reported experiencing depression within the previous year. There were significant ( $p < 0.05$ ) variations across ethnic groups: White = 39.5M, 25.8%; Black = 4.9M, 19.8%; Hispanic = 8.1M, 27.6%; Asian = 1.3M, 16.1%). Among those who report experiencing depression, whites were most likely to be diagnosed (77.0%) compared with 60.8% of blacks, 62.8% of Hispanics, and only 48.4% of Asians, who were least likely to be diagnosed. Among those who did not self-report experiencing depression, 11.2% of whites, 12.8% of blacks, 13.1% of Hispanics, and 13.46% of Asians experienced one depression symptom and 9.6% of whites, 11.9% of blacks, 13.2% of Hispanics, and 12.2% of Asians experienced both depression symptoms ( $p < 0.05$ ). **CONCLUSIONS:** While there is significant ethnic variation in prevalence of self-reported depression, there is even greater ethnic variation in diagnosis among patients experiencing depression. Also, recognition of symp-

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